SAFETY Education

Two Sections • Section One

The **NATIONAL SAFETY COUNCIL**, the heart of the safety movement in America, collects and distributes information about accidents and methods for their prevention. Organized on a nonprofit basis, the Council promotes safety in industry, traffic, school, home and on the farm.

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SAFETY Education

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• • *A MAGAZINE FOR TEACHERS AND ADMINISTRATORS*

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Over My Shoulder

Ralph Moses has been drawing posters that teach safety for the twenty-six years that he has been at the National Safety Council. When it was suggested that Over My Shoulder should have a sketch of the editor, Ralph drew it.

When some particular phase of safety education is being discussed by people who live in the northeastern area of the nation, some one will very probably say, "I heard that Rochester has been doing something like that." When Ed Smith, eastern regional director of the National Safety Council, visited here last summer, he was asked to find someone to write the Rochester story. He volunteered and it is presented, this month.

There were thirty-seven hundred and eighty-five accidents involving school buses in the thirty-four states participating in the 1951 Annual Inventory of Traffic Activities. Fifty persons, including thirty-nine pupils, were killed. Fifteen hundred and twenty-four were hurt. Marian Telford, Arthur A. Dick and Iva Lillge discuss school transportation problems in this issue.

Should the "Simple Family" posters, which appeared last month illustrating Idabelle Stevenson DeBlois' "I Well Remember" be re-issued? Some people have written, suggesting that they be slightly revised and re-issued. What do you think?

The profession can be proud that a teacher was considered to be the one woman in the nation who had made the most award worthy contribution to traffic safety last year. Mrs. Veva Tomlinson's pupils did not carry pedestrians across the street, as Dave O'Brien is in the Pete Smith-MGM film "Pedestrian Safety." They taught their elders to walk safely.

What are YOU doing in safety education? This is particularly addressed to you if you are in the field of elementary education. Perhaps your experience would contain the answer to some problem that is vexing another teacher, perhaps your work would be the final touch that would convince someone to increase his efforts. Maybe you are doing a good job and would just like to tell someone about it! May I hear from you?

Charles W Taylor

Fifty Are Killed in School Bus Accidents

by MARIAN TELFORD

THIRTY-NINE FATALITIES and 1,159 nonfatal injuries to pupil passengers in school buses were reported by thirty-four states in 1951. These states operated 87,533 vehicles and transported 5,019,135 pupils.

In addition two passengers who were not pupils were killed and thirteen injured. One driver was killed and forty-two others had nonfatal injuries.

Eight "others" were killed and 288 injured. These "others," in the majority of cases were passengers in or drivers of vehicles in collisions with school buses.

These data were secured from reports from states in the Annual Inventory of Traffic Safety Activities, 1951. States not reporting their schoolbus accident experience were: Alabama, Georgia, Idaho, Louisiana, Maine, Mississippi, New Hampshire, North Dakota, Oregon, Rhode Island, South Carolina, Tennessee, Texas and Vermont.

This brief summary of school bus accidents in 1951 is similar in many respects to the summary of the previous year which was transmitted through the pages of SAFETY EDUCATION approximately a year ago. In both years, school transportation was big business. Twenty-eight percent of the country's secondary and elementary school enrollment reached school in buses owned or contracted for by boards of education, according to reports from the Office of Education. School buses were eighty percent of the total bus output, according to AUTOMO-

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BILE FACTS AND FIGURES, 1951 edition, published by the Automobile Manufacturers Association.

In both years more than half of the fatalities to pupil passengers were the result of one of the five types of accidents on which information was gathered. In 1951, fifty-six percent of all school bus passenger fatalities were to pupils who were crossing highways to board school buses or crossing highways after alighting from school buses.

In 1951 only, however, did the number of pupil passenger fatalities exceed the number of accidents of one type reported. Six pupils were killed in five collisions between school buses and railroad trains.

School transporation specialists, school administrators, enforcement officers and others are engaged in continuous efforts to safeguard pupils who ride school buses. These efforts are directed toward the improvement of drivers through more careful selection and expanded training, the improvement of vehicles in school service, more adequate education and supervision of school bus passengers and more rigid enforcement of legislation governing the passing of school buses by other vehicles.

Perhaps more attention now is being given to the latter aspect of the problem. In thirty-nine states motorists approaching school buses from either direction must stop if the bus is stopped to take on or discharge passengers, and these motorists must remained stopped until the bus resumes motion or the school bus driver signals that it is safe for the motorists to proceed. To aid in this enforcement program several actions have been agreed upon in order to make school buses conspicuous vehicles in traffic. One is the adoption of a standard "National School Bus Chrome" color. Many buses are equipped with "stop" arms on the recommendation of a National Conference on School Transportation. An increasing number are equipped with alternately flashing signal lights.

SCHOOL BUS ACCIDENT DATA, 1951

(Source: Reports from 34 states, Annual Inventory of Traffic Safety Activities)

TYPES OF SCHOOL BUS ACCIDENTS	TOTAL No. OF ACCIDENTS	PUPILS		OTHER SCHOOL BUS PASSENGERS		SCHOOL BUS DRIVERS		OTHERS	
		Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
1. Collisions with one or more other vehicles	3061	5	685	0	9	1	34	1	288
2. Collisions with railroad trains	5	6	18	0	0	0	1	0	0
3. Other types of collisions	265	0	179	2	3	0	5	4	7
4. Non-collision accidents	296	6	146	0	0	0	2	2	15
5. Pupils struck crossing road to board or after alighting from school bus	158	22	131	0	1	0	0	1	0
Totals (34 states)	3785	39	1159	2	13	1	42	8	310

The 34 states whose accident experience is summarized above reported 87,533 vehicles in operation; 5,019,135 pupil passengers transported.

States omitted from the above tabulation are: Alabama, Georgia, Idaho, Louisiana, Maine, Mississippi, New Hampshire, North Dakota, Oregon, Rhode Island, South Carolina, Tennessee, Texas and Vermont.

School Transportation Becomes BIG Business

by ARTHUR A. DICK

SCHOOL BUS TRANSPORTATION is big business. There are on the highways twice daily during school days about one hundred and ten thousand school buses transporting about six and a half million pupils.

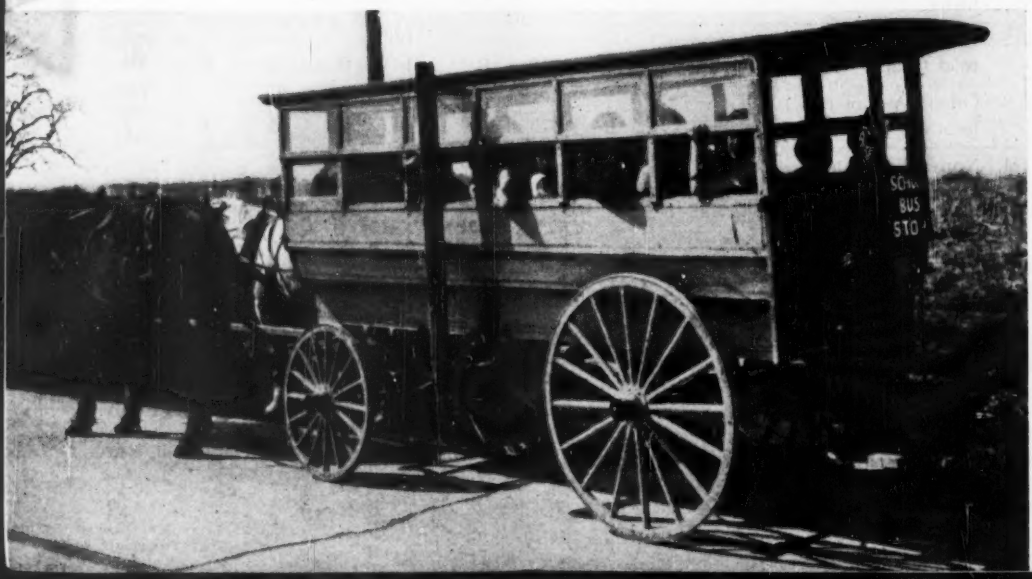
Carrying this number of pupils imposes a tremendous responsibility which must be shared by school officials, parents, police departments, traffic divisions, motorists and safety agencies.

Not only is school bus transportation a big business today when some thirty-two million elementary and secondary pupils are enrolled in the schools, but it is bound to increase as more and more of the post-war babies reach the age of compulsory school attendance.

Because school bus transportation is growing yearly, its scope of operation is becoming increasingly complex. This results in an increased demand and emphasis on precautionary measures and organized safety instruction.

Traffic congestion in densely populated areas is acute now. As more motorists use our highways school buses have less maneuvering space, less freedom of operation, less flexibility. An

Did you ever see this two-horsepower bus transporting pupils?



example of the effect of increased traffic density on school bus operation may be found in the experience of a suburban system of my acquaintance.

A few years ago one of their buses could make three short trips each morning and each afternoon. Now, because of the increased traffic density, this bus can make only two trips.

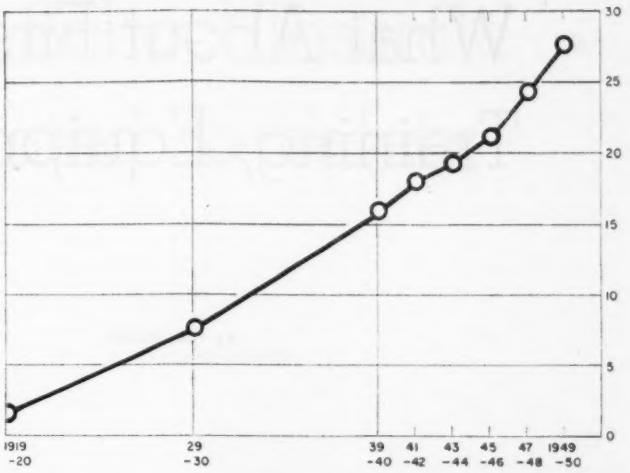
An analysis of the pressing school bus transportation problems boils down to these points:

- School systems should train school bus drivers.
- Mechanical perfection of school buses should be secured through a rigorous program of inspection and maintenance.
- Pupils should be taught proper safety habits.
- Accidents and near accidents should be utilized as teaching tools to prevent any recurrence of similar situations.
- Parents should be educated to realize the hazards and to accept their responsibilities in school bus transportation.
- Further research and clarification is needed by traffic experts of the school bus "stop" law, particularly as it applies to densely populated areas.
- The general motoring public must have more information about the laws governing and policies covering school bus transportation.

Certainly the selection of reliable and safety conscious school bus drivers is very important. But the very best of intentions are of little value without the specific information necessary to enable the possessor of the intentions to act wisely on them.

In some states the state department of education accepts the responsibility for providing a complete program of training for bus drivers. Other states leave this responsibility up to the local system and offer only advisory services. Where the turn-over of bus drivers is high, the problem of training the bus driver is even more complicated.

Growth of Pupil Transportation



School Term	Number Students Enrolled	Number Transported at Public Expense	Percent Transported at Public Expense
1919-1920	21,578,316	350,100	1.6%
1929-1930	25,678,015	1,902,826	7.4
1939-1940	25,433,542	4,144,161	16.3
1941-1942	24,562,473	4,503,081	18.3
1943-1944	23,266,616	4,512,412	19.4
1945-1946	23,299,941	5,056,966	21.7
1947-1948	23,945,000	5,854,041	24.4
1949-1950	25,111,427	6,980,689	27.8

Note: While all types of transportation are included, practically all of the children are transported in buses.

Source: U. S. Office of Education.

A continuous program of bus driver training is a prime requisite. Safety meetings should be held regularly and as frequently as is necessary to maintain a high degree of safety-consciousness among the drivers.

All school buses should be inspected systematically at regular intervals. This should be supplemented by an organized program of bus maintenance during the school months. Each vehicle should be given a complete overhaul during the summer months. A clean, attractive bus becomes an important factor, psychologically, in inducing good safety habits in both pupils and drivers.

There should be a definite age and mileage schedule for replacing buses.

School officials can make arrangements with

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ARTHUR A. DICK is supervisor of Vocational Education and Industrial Arts in the Baltimore County public schools.

What About First Aid Training, Equipment?

by IVA LILLGE

PARENTS, SCHOOL ADMINISTRATORS, departments of education, educational association and state highway departments have become aware of the many problems attendant upon the increasing number of school buses in operation. Serious thought has been given to the establishment of standards for school bus bodies and equipment in an attempt to provide safe, efficient transportation facilities.

Most states have provided standards for bus bodies which will contribute to safety. However, relatively few states require adequate first aid training for the bus driver and adequate first aid equipment for the bus. It is extremely important that buses have proper lights and signals, proper identification, proper mechanical equipment to insure safe operation. It is just as important to provide for first aid in the event that it is needed.

There are now fourteen states which do not require a first aid kit as a part of school bus equipment. Most of them require that a fire ax or fire extinguisher be included in the bus —thus acknowledging the possibility of fire. Yet they do not require the inclusion of the equipment to treat the burns which might be caused by that fire. Tools are required for necessary minor emergency repairs to the bus—how about minor emergency repairs to the passengers?

The other thirty-four states have given consideration to first aid equipment, although their requirements for such equipment are, in some cases, very vague. Seven, for example, indicate that a first aid kit may be carried in the bus, thus implying that its inclusion is sanctioned but is not mandatory.

Apparently only nine states have given the matter of first aid the full consideration which it warrants. These nine have positive legislation covering the inclusion of first aid kits in buses and providing for adequate training in first aid for bus drivers. They have established standards covering the sizes of kits to be installed and what first aid materials should be included in the kits.

A factor which may speed up such legislation in the other thirty-nine states is the regulation by the Interstate Commerce Commission that all carriers engaged in interstate commerce must carry first aid facilities.

Companies engaged in the transportation of human cargo—commercial bus lines, airlines and railroads—are well aware of their responsibilities and have taken steps to provide personnel and equipment for the first aid treatment of their passengers. Should the children who must use school buses every day be given less consideration?

In drawing up first aid specifications for school buses, the first step must be a thorough study of the hazards peculiar to the transportation of children and to the area in which the buses operate. The results of this study will serve as a guide to standards for equipment to

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IVA LILLGE is an employe of the Medical Supply Co., Rockford, Illinois. The company makes and distributes first aid supplies.

High School Institute Devoted to Safety

by MILDRED KEIFFER

THE FIRST HIGH SCHOOL Safety Institute conducted by the public and parochial high schools of Greater Cincinnati was held on April 26, 1947. High school pupils from each public and parochial school were brought together with representatives from the community for the purpose of studying the traffic safety problem in Cincinnati. The Institute was so well received, the results were so gratifying, that plans were made to continue it as an annual contribution to safety education.

With a program extended to include four phases of safety, important to all growing children, the Sixth Annual High School Safety Institute was held at Walnut Hills last spring.

It is believed that this annual institute is the first of its kind in the country.

Sixty-six public and parochial high schools representing six school systems participated in the sixth institute. There were approximately 550 pupils and ninety faculty sponsors in at-

Marshall Joseph Devine, of the Cincinnati Fire Department, explains the fire-safe way to handle an electric cord and iron to a sub-group of girls at the Sixth Annual High School Safety Institute. ***Cincinnati Chamber of Commerce photo.***

tendance. About eighty representatives from non-school agencies and organizations interested in safety assisted in the institute.

Following the success of the first institute it was planned to emphasize, consecutively:

- Traffic Safety
- Fire Safety
- Safety in the Home
- Safety in Recreation

Thus, the Sixth Annual High School Safety Institute stressed fire safety.

An institute of such scope requires a considerable outlay of funds. Our Greater Cincinnati institute is financed by the Junior Town Meeting of Cincinnati.

The Junior Town Meeting is a weekly discussion program given by the high school pupils of Greater Cincinnati and broadcast by Radio Station WLW. It is a sponsored program with the commercial advertising limited to institutional advertising.

The revenue from the program goes into a fund which is administered by the Junior Town Meeting Executive Committee composed of representative administrators from the public and parochial school systems of Greater Cincinnati.

The first institute was financed with funds subscribed by interested agencies and individuals but the subsequent institutes have been paid for by the Junior Town Meeting.

The cost of the Sixth Annual High School Safety Institute was less than $1,500. This low cost was possible because a local high school building was used and the luncheon was provided at cost. Program and name cards cost $370, checking, parking, public address systems, etc., $150, luncheon and decorations $900.

THE SAFETY INSTITUTE IS an activity for pupils and as much responsibility is delegated to them as is possible.

Pupils assist with the planning of the institute.

Pupils preside at the general sessions and at the luncheon.

Pupils were the chairmen and recorders at the discussion groups.

Pupils participated in the panel discussions.

From the size of the attendance and from the cost, it can easily be seen that the institute is not an extemporaneous affair. Early in 1952 the superintendents of the six school systems, or their associates, met with representatives of the local agencies interested in safety to organize a planning committee for the Sixth Annual High School Safety Institute. A rough outline of the program was worked out at this meeting.

The Pupil Planning Committee reviewed the program proposed by the committee of adults and made its recommendations. Every effort was made to follow the pupils' suggestions in the final arrangements.

The Pupil Planning Committee also prepared lists of discussion questions which were sent out to the participating schools for advance study and preparation, after they had been approved by experts in various areas.

The opening session of the institute was pre-

In keeping with the theme "Make '52 Fire-Safe for You," home fire hazards are pinpointed by invited consultants at the Sixth Annual High School Safety Institute. *Cincinnati Post photo.*

sided over by a pupil. It was limited to twenty minutes. At previous institutes the opening session had run for a longer period of time but the pupils were insistent that twenty minutes was enough to introduce the session theme.

The delegates separated for the next forty-five minutes, according to their school assignments, into four assemblies dealing with traffic safety, fire safety, safety in the home, and safety in recreation.

In these assemblies programs were provided which again used pupils to assist in the planning, preparation, and presentation. They made use of brief offerings by invited experts, films, demonstrations, panel discussions, and skits with pupil participants. The assemblies were designed to provide background information and stimulation for the sixteen discussion groups into which the pupils then divided.

The participating schools sent representatives according to a carefully worked out schedule, assigning delegates to the sixteen groups according to the schools' own interests. There were four groups for each of the four phases of safety.

Experience in preceding years demonstrated that a discussion group of about thirty-five pupils is best. Adult consultants must be carefully selected to assist in these groups and great care must also be exercised in the appointment of the pupil chairmen and recorders. These adults and pupils had several special training meetings in group process and discussion techniques in advance of the institute to prepare them for their leadership roles.

The discussion groups made use of the question lists as a starting point. At least an hour and a half has been found necessary for this part of the program. One of the main points receiving the attention of the discussion groups was how to inform the respective schools about what was learned at the institute.

The success of the institute is very largely determined by the work of the discussion groups. Here each delegate has an opportunity to participate and to voice his opinions. The pupils made it very clear that they did not want to give up their discussion groups or to have the time for this activity reduced.

The problem of reporting the high points of each discussion group to the total institute has not been satisfactorily solved. The Pupil Planning Committee said the delegates would want to hear about the other groups and suggested that a panel presentation be made after the luncheon. Four special pupil reporters were given the responsibility of taking part in the panel discussion. It was led by an adult trained in this activity. These reporters had lunch with the recorders of the discussion groups and during this time collected the best contributions from each group. They then consolidated them for presentation at the second general session.

Experience seemed to indicate that it is best not to attempt a program during the luncheon. Lively group singing and band music has been used successfully for entertainment at this time.

The second general session, with another pupil presiding, opened with the panel of pupil reporters. Following these reports an invited speaker delivered an address on fire safety, the phase emphasized at this institute.

The enthusiasm generated at the institute must be used and, for this purpose, it is important that a well planned follow-up program be carried out in each school.

The Pupil Planning Committee was greatly concerned with this matter and recommended that reports be made in school assemblies and student council meetings or in home rooms in smaller schools. They described successful panel discussions, skits, dramatizations and radio and TV programs they had used in their own schools to report previous institutes.

The same group held an evaluation meeting immediately following the institute and the recommendations that increased care be used in the schools when pupils are assigned to discussion groups will be stressed next year. The pupils felt strongly that the main address should be designed to appeal to high school people and should include as much humor as possible. They were firm in their belief that the afternoon program should not be long.

All the school systems, public and parochial, in the Greater Cincinnati area are conscious of the expert community assistance available to them through the all-day safety institute. They work together to make the best possible use of it. A great advantage of the institute idea is its flexibility and the ease with which changes and adjustments can be made to fit the occasion. The planning is accomplished by means of a planning committee of representatives of the schools and cooperating agencies and a pupil planning committee. All particiapnts are confident that the educational values of the institute are multiple and worthy.

MILDRED KEIFFER is an assistant supervisor in the Cincinnati public school system.

Rochester–

Pioneer in Safety

by EDWIN S. SMITH

Left: Monroe high school indoor patrol on duty in corridor at assembly dismissal. *All photos of school activities were taken by Capt. William A. Winfield, Rochester Bureau of Police.*

Right: School safety patrol captains from public, parochial and county schools receive awards at the annual Rochester Safety Council meeting with the Chamber of Commerce.

The Rochester program begins when the children first come to school and continues as long as they stay in school. *Above:* The Third grade class representative to the Junior Safety Council reports to First graders.

LITTLE DID THE DELEGATES to the first safety congress held in Milwaukee in 1912 suspect that their call for a cooperative effort to control accidents was being answered literally, hundreds of miles away in Rochester, New York. But while the Milwaukee safety pioneers were wrestling with the industrial accident problem, the Rochester people were concerned with stopping accidents to children. These early efforts in Rochester have since been recognized as constituting the first organized child safety program in the nation.

Herman J. Norton

Responsible for leading the Rochester program was a young man who held the title, Director of Playgrounds. He saw that accidents were increasing among the boys who played baseball and engaged in other sports activities. He decided that one way to stop accidents was to provide training in first aid and in other safety activities. The young man was Herman J. Norton, long recognized as a leader in safety education.

Two years later Norton joined the Rochester public schools as Director of Health and Physical Education, a position which he has held continuously since 1914.

In 1912 there were few guideposts pointing the way to effective safety education. Each step had to be worked out by trial and revision, revision and trial. An early addition to Rochester's program was camp safety. Outdoor camping was responsible for accidents so camping safety took its place beside first aid. In fact, the city's first Boy Scout troop was developed as a result of the boys' camp forty years ago.

In 1914 Norton set up some simple safety suggestions in a four-page pamphlet which became a part of the physiology course being taught in the elementary schools. This was the start of the safety curriculum. However, Norton's experience on the playgrounds had taught

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EDWIN S. SMITH is director, eastern region, National Safety Council. Mr. Smith's home is in Rochester where he was for a number of years director of the Rochester Safety Council.

him that rules without an opportunity to put them into practice were sterile. He realized that something more than rules was needed to vitalize safety for the pupils.

The first break in this direction came in 1915. The Chamber of Commerce safety organization, then known as the Rochester Chamber Local No. 9 of the National Council for Industrial Safety—later named the Rochester Safety Council—joined forces with Norton to sponsor the city's first safety campaign.

Together they organized the Boys' After School Recreation Clubs. Each week letters written in "boy language" covering safety in the home, on the street, at school and on the playground were sent to the members. One such letter, sent out May 17, 1915, ended as follows:

> Safety First is but another ball game. Every street is a baseball diamond, every trolley car, every wagon, every automobile may be considered a player on the opposite team. If you are thoughtless and are tagged on the bases YOU MAY BE MADE A CRIPPLE FOR LIFE! It's a great game, boys —this Safety First. Put on your masks, your shin guards and chest protectors and get into it.

At the same time parents were sent letters urging their cooperation. The club members actively promoted safety by inspecting playground apparatus, quarry holes, backyards, alleys and streets. Soon the daily newspapers joined the effort and interest mounted among the people of the city. Thus, a "safety conscience" was being created in Rochester.

This civic spirit for safety has grown year by year becoming a major factor in helping Rochester to win numerous national awards.

In the spring of 1916 the boys' club presidents organized as a Grammar School Safety Council, the forerunner of the Junior Safety Council movement which eventually spread to include all of Rochester's public schools. This early school safety council was a part of the Rochester safety council organization and met with civic and business leaders throughout the year.

A member of the civic group, a bank president, commented: "I never dreamed that twelve and thirteen year old boys could conduct a business meeting in such a way as to put to shame many business men whom I have seen conduct such meetings."

Cooperation between the business men and the school children was hailed by principals and teachers as "honest-to-goodness real life civics, the kind that means something in the life experience of a child."

From a small beginning the child safety campaign grew in a short time to be a popular school movement. The pupils of the upper elementary grades served as members of the Junior Safety Council. They created their own by-laws, elected their own officers and organized

Below: Safety patrol members at the Blessed Sacrament parochial school direct bicycle parking and bicycle riders. Patrol members are charged with preventing children from riding on the schoolground. *Right:* Lieutenant Joseph Baglin, school safety officer, presents an award to a pupil of the Number 4 school safety patrol. Incentives are freely used to encourage safety at Rochester.

Patrol members assist primary teachers in various ways. Here members are on duty during an indoor play period at Number 23 school.

their work under the guidance of the physical education teachers. Some accomplishments were: fourteen hundred essays written on accident prevention, two thousand merit pins distributed in recognition of significant safety work and thousands of circulars on safety distributed in the schools and homes.

The boys formed special committees in many schools to stop snowballing near the buildings. At schools where there were dangerous traffic conditions the committees took over the job of looking after the younger children at the beginning and end of the school days. This was the beginning of the school safety patrols in Rochester.

As a finale to this first safety campaign, two shows were held in the city's largest auditorium, Convention Hall, attended by seven thousand pupils and their parents.

WITH THIS EARLY BACKGROUND of safety activity demonstrating the community's alertness, it was quite natural that the National Safety Council should select Rochester in 1918 as the place to experiment with a local public safety program.

Previous activities in this field had been fragmentary. Julien H. Harvey, then on the National Safety Council staff, was assigned to plan and direct an effort to determine how best to combat traffic and other public accidents on a community-wide basis.

Originally slated for a six-months trial, the campaign lasted a year. Eleven thousand dollars was spent of which five thousand was contributed by the national organization. A decline in accidents of 8.3 percent during the closing three months of the drive was hailed as evidence of success. This experiment once more qualified Rochester for a "first," establishing it as the city to have organized the first public safety effort in the nation.

It was agreed by students of the subject that the public safety problem, at least in a city of a hundred thousand or more persons, demanded a well-organized, continuous and comprehensive community safety program. As an integral part of the campaign the junior safety councils organized assembly programs, promoted contests and sought out accident hazards.

THE COURSE OF STUDY in safety was developed in 1921 when Norton and Miss Edith M. Walker, an associate, were appointed by the New York state education department to a committee to work out a health education course for the state's public schools. Norton "sold" the state hygiene committee, of which he was a member, on the need for more emphasis on safety in the state's hygiene syllabus.

Thus was born the first safety education course to be taught in the elementary public schools in the state of New York.

While certain Rochester schools had provided the equivalent of a student safety patrol as an outgrowth of the earlier Grammar School Safety Council, it was not until 1922 that the city-wide system of patrols was formally adopted.

A feature of the inauguration was an installation ceremony presided over by the captain of the Rochester police traffic department. In addressing the patrols he explained that the police considered the patrol members to be their assistants. One of the newspapers commented that "motorists must obey the signals of the junior traffic officers in school zones." Patrol members of today confine their direction to pupils and do not attempt to direct motor traffic.

It was in 1922, also, that student traffic courts were established to implement the safety lessons taught in the classroom. Penalties ranged from reprimands for minor offenses to loss of privileges as great as exclusion from extra-curricular activities.

In 1924 Elmer K. Smith, another safety education pioneer and Norton's assistant since 1912, revamped the entire junior safety council organization. Standards were set up to be followed throughout the school system. Awards were provided for pupils who demonstrated an outstanding interest in safety. The highest award, a "star" membership, was given to a pupil who had agreed to live up to twelve fundamental safety rules. The Rochester Safety Council provided the awards.

The safety curriculum was revised in 1929 with the assistance of Marian Telford of the National Safety Council staff. Continuous cooperation with the police was advocated as the program developed. Both the leaders of the Rochester Safety Council and the school officials urged the chief of police to appoint police officers who would spend all their time in school safety patrol work.

In 1931 Andrew Kavanaugh, then chief of Rochester police now Commissioner of Public Safety in Wilmington, Delaware, assigned three officers to full-time safety duty, working with the public and parochial schools. The officers trained and inspected school safety patrols, spoke at safety assemblies and Junior Safety Council meetings, supervised bicycle inspections and handled literally dozens of other safety chores at the schools.

At East high, Lieutenant Keeler, Rochester police, observes as Ray Harmon conducts a behind-the-wheel class in driver education.

ANOTHER "FIRST" WAS CHALKED up for Rochester in 1932 when Monroe high school organized a safety patrol, the first successful senior high school patrol in the country. All senior high schools now have safety patrols.

In 1939 driver education was begun in two high schools. Interrupted by World War II, it was re-established and expanded to include all public senior high schools in 1947.

Throughout the years the one element which has marked the advance of safety education in Rochester has been the close cooperation among those concerned with accident prevention. The police, Rochester Safety Council and the schools have worked hand in hand. Recently the Automobile Club of Rochester, the Board of Underwriters, and the Automobile Dealers'

to page 20

Roger Morse, health education teacher at East high school, with some of red jacket uniformed secondary school patrol members.

First Lady in Traffic Safety

From among almost a hundred nominations of women who have actively promoted some phase of traffic safety during the past year, the committee of judges for the Carol Lane award has chosen Mrs. Veva Barber Tomlinson, a teacher at Central high school, St. Joseph, Missouri.

Mrs. Tomlinson was teacher of a class in common learnings which, last year, conducted a campaign of pedestrian safety. Partially as a result of the campaign, three hundred and two days elapsed in St. Joseph without a pedestrian fatality.

Details of the campaign were told in the May issue of SAFETY EDUCATION under the title "Pupils Turn Tables, Teach Adults Safety."

The Carol Lane award is administered by the National Safety Council through a grant of the Shell Oil Company. It consists of a $1,000 defense bond and a statuette created especially for the award.

The committee of judges included Mrs. George W. Jaqua, safety chairman, General Federation of Women's Clubs; Miss Fanny Kenyon, M.D., safety chairman, National Federation of Business and Professional Women's Clubs; Mrs. Fred Knight, safety chairman, National Congress of Parents and Teachers; Guy L. Noble, managing director, National Committee on Boys and Girls Club Work; and Ned H. Dearborn, president, National Safety Council.

Mrs. Tomlinson was nominated for the award by Walter Ladd, secretary of the St. Joseph Safety Council.

In awarding the trophy to Mrs. Tomlinson the judging committee considered that her work in safety was not a regular part of her teaching assignment, that it was concentrated on one specific phase of safety, and that it had measurable and appreciable results, said Alice Mills, director of women's activities of the National Safety Council, who served as secretary of the committee.

A special award was made by the committee to Mrs. Guy M. Pelton, Evanston, Illinois, whose long time work in safety has brought her national recognition. Honorable mentions were made of the work in traffic safety done by Mrs. Henry W. Hight, Henderson, North Carolina; Mrs. Sidney Arnold, Waldo, Arkansas; and Mrs. Sam S. Nowlin, Montgomery City, Missouri.

The presentations were made at the 40th National Safety Congress.

Are public schools responsible for the driving habits of adults and out-of-school youths? In Pennsylvania, the answer is a permissive "Yes." The reasoning on which Pennsylvania bases its assumption of the responsibility and the means by which the state enables the local school district to meet costs are told here.

Shall Public Schools Teach Adults to Drive

by A. W. CASTLE

IN THIS AUTOMOBILE AGE, with its many problems of highway construction and traffic regulation, we are all familiar with the mounting toll of traffic casualties. Among those charged with the responsibility for highway safety there is a consensus that driver education is an indispensible part of any program which is planned to reduce the toll. The question "Whose responsibility" however remains, for the greater part, unanswered.

While admittedly Pennsylvania, like many other states, is decades late in attacking this urgent and vital problem, a good beginning has been made. Fortunately the philosophy of public education underlying its state system of free public schools virtually makes mandatory the provision of driver education courses for all day-school pupils who are eligible for a state learner's permit and for out-of-school youths and adults as well. A brief summary of that philosophy can be stated as follows:

If we agree with John Dewey that "education is the adjustment of the individual to his environment," the justification for free public school driver education courses seems obvious. Certainly our highways and streets, crowded with trucks and automobiles, constitute a very important and formidable part of the environment of every man, woman, and child—whether driver or pedestrian.

The bearing of Doctor Dewey's basic principle upon our public school programs, as a part of the over-all education picture, likewise seems obvious. The writer's own personal corollary of Doctor Dewey's statement, as applied to public education, can be worded somewhat as follows:

The sole purpose of, and justification for, free public education in a democratic social order is the achievement of *social competency* by the individual.

Again, social competency on the part of all our youths and adults must include the ability to drive an automobile intelligently with a high degree of assurance of safety to other drivers and pedestrians.

A third phase in the philosophy of public education in Pennsylvania as it relates to this problem can be stated as follows:

Every resident of a school district, whether taxpayer or renter, and whether citizen or alien, contributes either directly or indirectly during every week of the year to the support of his local program of free public education and, therefore, has an inalienable right, in accordance with his needs, to a pro-rata share of the free public education thus provided, regardless of his age, his economic circumtances, or where he lives within that district.

A. W. CASTLE is chief of the division of extension education, Department of Public Instruction, Commonwealth of Pennsylvania.

That the resident makes contributions is self-evident. Every resident of a school district will find that to the price he pays for every loaf of bread he buys, every bottle of milk, every pound of butter and every pair of shoes there has been added a certain surcharge either in the form of direct or hidden taxes. These taxes find their way into the coffers of his local board of school directors and into the state treasury.

Although worded in dry, general, and philosophic terms, this concept, when accepted, insures an equalization of free public educational opportunities for out-of-school youths and adults.

It was this concept that made possible in 1925 the enactment of Section 1906 of the Pennsylvania school laws which states that all types of instructional, recreational, or social services maintained by a board of school directors for out-of-school youths and adults "shall be an integral part of the public schools of the Commonwealth and of the district in which it is organized." This provision in one sentence made all pertinent legislation governing the day-schools in Pennsylvania equally applicable to the administration of extension schools and classes for out-of-school youths and adults. It included the provision of free texts and materials and state aid for the maintenance of such classes in an amount equivalent to that given in support of day elementary and secondary schools.

It should be added that, in accordance with the foregoing principles, Section 1902 of the Pennsylvania school laws requires boards of school directors to maintain, free of charge, for out-of-school youths and adults, any course of study or activity within its day elementary and secondary school program whenever fifteen or more residents of a school district above the age of sixteen, and who are not in any public or private day-school, make written application.

Under the capable leadership of our state director of driver education, Ivan J. Stehman, rapid progress is being made in the development of driver training courses for eligible high school students. At this time three hundred and twenty-three school districts in Pennsylvania are maintaining driver education in their high school programs.

Whenever driver education courses are established as a part of the day high school, the mandatory legislation makes the organization of extension driver education courses for out-of-school youths and adults an immediate possibility. At this writing a good beginning in establishing driver education for out-of-school youths and adults has been made. Approximately one hundred districts are now maintaining such courses.

State aid available to the school districts of the commonwealth is, under our laws, the equivalent of the required minimum salary of all the teachers employed in the district multiplied by the reimbursement fraction of the specific district. This reimbursement fraction is a rough index of the relative wealth, or ability to pay, of a given district.

In the 2524 school districts in Pennsylvania the reimbursement fractions vary from about twenty-seven percent in the wealthiest school districts to about ninety-eight percent in the poorest. The average is about seventy-eight percent.

The required minimum salary of driver education teachers in extension school classes for out-of-school youths and adults is $2.50 per hour. When the reimbursement fraction factor is used, it means that only about twenty-two percent of this cost comes from the local funds of the school. The state aid amounts to about $1.95 of the $2.50 per hour minimum salary. Obviously about half of the school districts receive less than this amount in state aid and the other half receive more.

An effort is being made by the Pennsylvania Department of Public Instruction to make up for time previously lost. We are attempting to increase the facilities available to out-of-school youths and adults in driver education, as well as those available to persons in regular classes.

Aside from our tragic and increasing highway accident fatalities and injuries, the economic losses, incurred through the wrecking of cars and trucks, makes the generous spending of public funds for driver education one of the best financial investments which Pennsylvania can make.

First Aid Contest for Children

A contest which awards prizes to children "for their knowledge of safety and first aid" has just been announced by Bauer & Black, manufacturers of surgical dressings.

To enter the contest each child must color a safety picture, answer questions on first aid and complete a safety jingle. Contest material may be obtained at drug stores.

A total of 3,241 prizes, the grand award being a $1,000 government bond, will be given. The contest closes December 7.

Denver's Cooperative Venture in Child Safety

Unusual, not only in that it involved rival mediums of advertising, but also in its attention getting appeal, was a recent Denver cooperative venture in calling motorists' attention to child and pedestrian safety. A safety billboard of the General Outdoor Advertising company was dismounted and sawed into a ten by twenty foot jig-saw puzzle. Some one hundred public and parochial school children reassembled it in a civic ceremony. Participating in publicizing the event were the Denver Post and Radio Station KLZ-CBS and the Denver chapter of the National Safety Council.

Camping, School Shop Books Reviewed

by ROY L. VAN DUZEE

Education for Safety Through the School Shop. Accident Prevention Department, Association of Casualty and Surety Companies *and* Center for Safety Education, Division of General Education, New York University. New York. 1952. 109 pp.

IT HAS BEEN my conviction for many years that a program of accident prevention in school shops must include as features at least three things; namely, (1) a safe place in which to work, (2) a proper instructional plan, and (3) the adequate supervision of the safety instruction program including proper accident reporting and record keeping of school shop accidents.

I have just finished reading **Education for Safety Through the School Shop** and I am impressed with the excellent job that was done by the Accident Prevention Department, Association of Casualty and Surety Companies, and the Center for Safety Education, New York University. Of course only a fine job would be expected from men listed in the advisory and organization committees. The representation on the committees has assured that the publication would authoritatively cover the various phases of safety in the school shop.

The matter under consideration in Chapter 1, "Planning and Programming for Safety in the School Shop," describes what must be done to have a safe shop in which to conduct classes. The treatment is complete, accurate, and very helpful.

The remaining chapters of the book deal authoritatively with promoting safe practices in six of the most commonly offered school shop activities. The use of bold face type provides a positive method of emphasizing the teaching of the correct way to use hand and machine tools and other equipment.

By following **Education for Safety Through the School Shop,** an inexperienced teacher would have a good basic guide to the teaching of safety in his shop. An experienced teacher would be helped by the book to improve his teaching in the proper use of tools.

The instructional plan should include a progress record of safety instruction given each student. This should include presentations, tests and practice of manipulative processes under the guidance of the teacher. The use of the book in the shops of a school system, supplemented by an adequate plan of supervision of the safety program and of keeping accurate records of shop accidents, should reduce school shop accidents to a minimum.

ROY L. VAN DUZEE is director of the West Allis, Wisconsin, school of vocational and adult education.

by R. T. DE WITT

CAMPING FOR ALL IT'S WORTH. Wm. E. Swanson. The MacMillan Co., New York. 1952. 152 pp.

MANY PHASES OF OUTDOOR living related to camping, and some not essentially related, are in this book. Errors of omission, however, leave much to be desired in completeness.

The author covers the subject of camp shelters thoroughly and presents several new ideas regarding construction. In other phases of camping he is not complete in his discourse and often presents ideas, interesting and sometimes well founded, which are not in agreement with camp authorities in general.

One point for example is his recommendation that camping should be conducted only in areas accessible by car and that "a camp on an island is to be avoided."

Quite frequently the safety aspects concerning the topic of the moment are discussed. Chapters 12, 13 and 15 are specifically concerned with health and safety and point up procedures of value.

The book is well organized into topics and sub-topics but with some of the latter the author tends to wander to somewhat irrelevant material.

Excellent line drawings illustrate most of the material.

The book is an excellent reference for camping and for camping courses as it indicates many inexpensive ways to enjoy the activity to the fullest.

R. T. DEWITT is associate professor of physical education at George Peabody College for Teachers.

What About First Aid?

from page 6

meet the various emergencies and for areas of concentration in the training of the bus driver.

Provision should be made for meeting the every day emergencies—the scratches, cuts and bruises which seem to be inevitable wherever there are groups of lively children. An antiseptic and a variety of bandages, then, would most certainly be included in the kits. A burn ointment might be included. A pair of forceps for the removal of splinters would be worth considering and in some of our western states the inclusion of special snake bite first aid should be considered.

For serious emergencies, items such as a tourniquet, splints, and ammonia for treatment of shock would be necessary. The anticipated emergencies will suggest their own first aid requirements. The important thing is that these emergencies **are** anticipated. Of course, no equipment is of a great deal of value in the hands of an untrained person.

Two first aid systems are available to the user, the unit type and the bulk type. Those states which have put concentrated effort into the establishment of their first aid needs seem to have arrived at the conclusion that the unit type is best suited to school buses. Unit first aid cases are made of steel and are equipped with hangers by which they may be fastened to the interior of the bus. This makes them easily accessible and keeps them out of the way.

The units themselves are small cartons containing one or more individual first aid treatments. For example, a unit of adhesive bandages contains sixteen individual sterile bandages; a unit of antiseptic swabs contains ten individual vials with enough antiseptic in each for one application; a unit of two-inch bandage compresses contains four individually wrapped sterile compresses with attached bandage.

This system does away with the necessity of carrying half-filled bottles of antiseptic or half-used rolls of bandage, no longer sterile. Waste and breakage are reduced to a minimum. Unit kits come in sizes appropriate for variously sized bus loads.

Bulk type kits are those which are commonly sold in drug stores. They include an assortment of bandage gauze, adhesive tape, burn ointment and bottles of antiseptic. Their primary advantage lies in their low initial cost, although maintenance of the kits may be sufficiently inconvenient to offset the cost.

In addition to providing adequate first aid supplies, schools should make provision for instructing the bus driver in the fundamentals of first aid. Courses are offered at no charge by the United States Bureau of Mines and by the American Red Cross. Both of these agencies are cooperative in organizing classes. Both will attempt to instruct the driver so that he can become adept at administering first aid and, additionally, so that he will recognize the importance of calling in trained medical assistance whenever that is necessary. In other words, they will teach that first aid is aid only, not treatment.

In areas where the number of drivers is very limited, it might be worth while to organize a class in first aid consisting, in addition to the bus driver, of those children whose maturity and interest indicates their ability to profit from the instruction. In an extreme emergency there is no guarantee that the driver alone would be capable of administering first aid to a group of frightened, injured children.

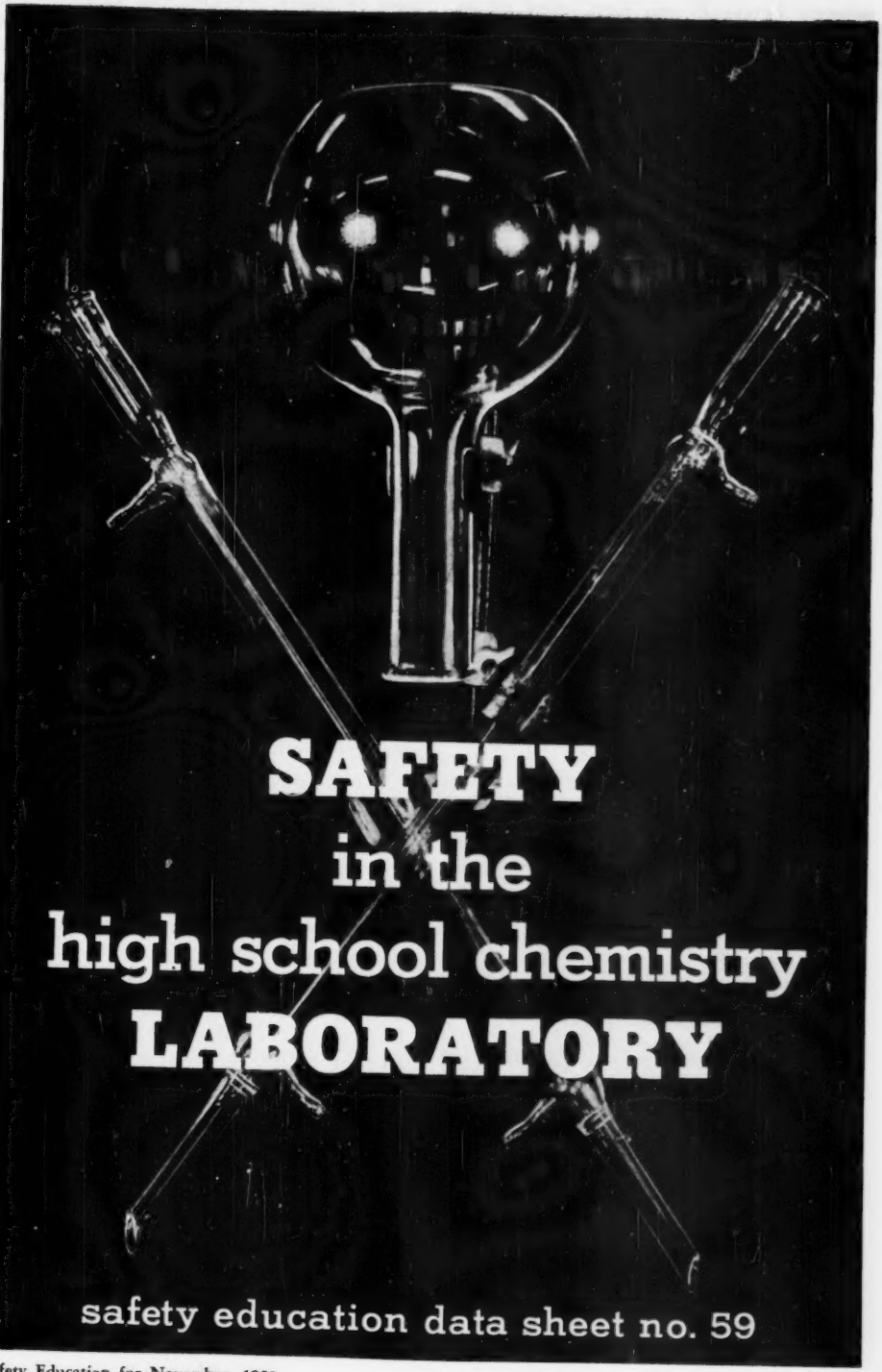
One state has solved the problem of driver training through conducting an annual summer institute for school bus drivers. At this five-day institute courses are offered in safety education, child psychology, public relations, and standard and advanced first aid. The need for adequate first aid facilities and proper instruction in the use of these facilities has been clearly recognized by this state. It might well serve as a model for these states which have not yet been able to work out a thorough, safe transportation system for their school children.

Rochester

from page 14

Association have contributed significantly in developing the program of driver education.

Through all of the many and varied activities which have marked Rochester's progress in safety education one person stands out, "H. J." as Herman J. Norton is affectionately known to many of his colleagues and friends. Today the efficient team of Norton, Miss Walker and Elmer K. Smith, working in the Department of Health, Safety, Physical Education and Recreation of the Rochester board of education, are planning new moves for the years ahead.


SAFETY
in the
high school chemistry
LABORATORY
safety education data sheet no. 59

FEW PLACES IN THE high school are as potentially dangerous as is the chemistry laboratory. That more pupils have not been injured is a tribute to the instructors. The Standard Student Accident Report form now in use does not provide for separate classification of chemistry laboratory accidents.

A chemistry laboratory will be safe if:

I. It is physically safe.

II. It contains the necessary emergency equipment.

III. It contains first aid materials.

IV. The pupils have and use the required personal protective equipment.

V. The instructor understands all of the hazards involved in the laboratory and is alert to see that the pupils act accordingly.

The Laboratory

1. The laboratory should be well lighted. Artificial lights should be explosion proof, especially those lights inside the hoods.

2. If the pupils do not have individual desks there should be enough work space available for each pupil so that there is no possibility of one pupil jostling another.

3. The laboratory should be provided with a sufficient number of containers for the disposal of broken and discarded glassware and other containers for the disposal of hazardous wastes so that the pupils will find it easier to be safe than to be careless.

4. A drinking fountain inside the laboratory will make it unnecessary for pupils to use beakers as drinking glasses.

5. The laboratory floor should be kept clean. Rubber stoppers, burette clamps, ring-stand rods and other laboratory apparatus on the floor constitute tripping hazards.

6. Reagent shelves should be equipped with a ledge so there will be no possibility of a container slipping off the shelf.

7. A safe laboratory has sufficient hood capacity so that no pupil will need to conduct experiments producing toxic or noxious gases at his desk.

8. Industrial laboratory hood specifications call for air velocities of not less than 75 linear feet per minute into hoods, evenly distributed over the full face area, and 100 linear feet per minute or more if the hood vent is exposed to drafts.

9. The glass in hood doors should be shatter proof. Laminated glass, known as automobile safety glass, or glass embedded with wire mesh is acceptable.

10. Only explosion proof lights should be placed inside hoods.

11. Particular attention should be paid to the hood's escape outlets so that corrosion will not allow the noxious or toxic vapors to leak into other parts of the school building.

12. Unless the hood exit is properly protected, trash or bird nesting materials may accumulate in sufficient quantities to restrict the air flow.

13. The exit should be so located that there is no possibility that the exhausted gases will blow back into the school building through an open window or door, regardless of wind direction.

14. Where hoods of sufficient capacity are not available or are not satisfactory in design, the illustrated apparatus hook-up will be acceptable for the generation of VERY SMALL quantities (less than 500 ml.) of noxious or toxic gases. *(See illustration on opposite page.)*

15. A precautionary note. The apparatus should not be used for the generation of hydrogen and chlorine in rapid succession. The two gases unite violently in the presence of ultra

violet waves to which good heat resistant glass is transparent.

16. Laboratory desks and furniture should be constructed of nonflammable material or, if of wood, should be treated to reduce flammability.

17. A formula for flame-proofing may be found in the handbook of the Chemical Rubber Publishing Company, Cleveland, Ohio.

18. Both the laboratory and the storeroom should be equipped with an automatic sprinkler system. Water may not extinguish the laboratory fire but it will cool it and prevent or delay its spread.

19. Pupils should not have indiscriminate access to the laboratory storeroom. A divided door, the upper half of which may be opened while the lower half remains locked, is desirable.

20. A small table, set up just inside the storeroom door, will provide a safe place for dispensing the reagents and equipment for the immediate experiment. It will also give the instructor an opportunity to double check on the correctness and the quantities of the chemicals being dispensed.

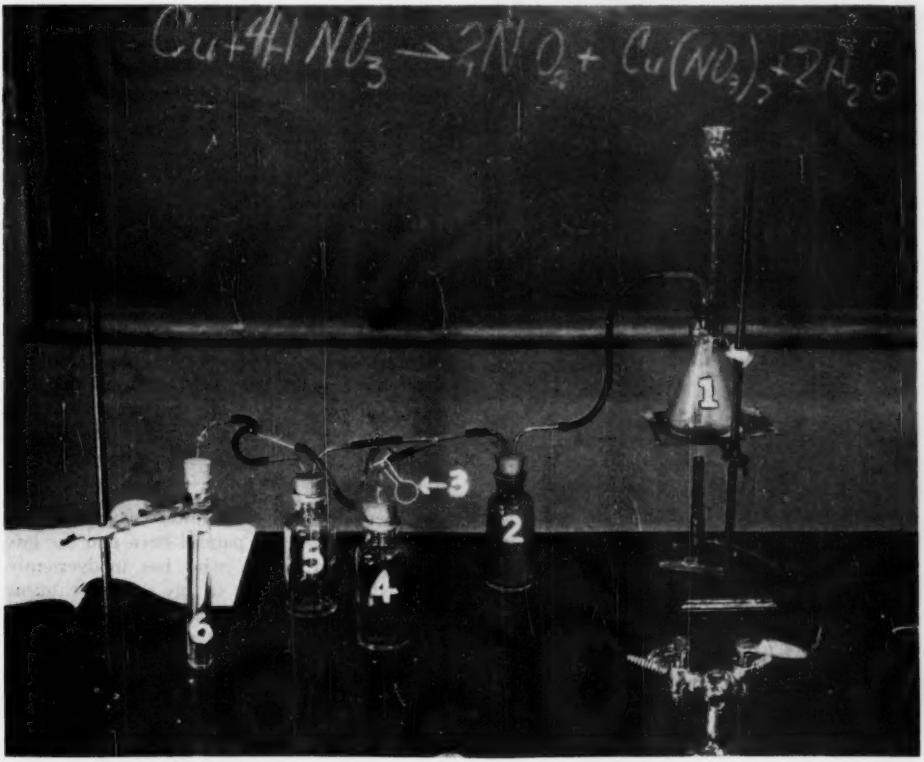
21. While good housekeeping is the prerequisite to safety in the laboratory, it is doubly so in the storeroom.

22. The floor should not be used as a storage area.

23. The storeroom should be equipped with a floor drain. There should be sufficient water capacity to provide for fast and thorough flushing of spilled reagents.

24. Spilled chemicals should be swept up or flushed away immediately.

Small quantities of noxious gases may be generated safely in the apparatus set-up illustrated below. The thistle tube extends below the surface of the liquid in the generating flask (1). The gas is led into a dehydrating container (2) thence through a Y-tube into the collecting bottles (4 and 5). A pinchcock (3) allows the instructor to direct the gas flow into either collecting bottle and prevents the escape of gas into the room when one of the bottles is being removed from the train. An absorbent, suitable for the gas being generated, is put in the test tube (6) to close the train. ***All photos, except the face fountain, page 25, and the glass tube sequence, page 27, were posed at the University of Chicago by pupils at the secondary laboratory school.***



25. Two-liter bottles should be the largest sized containers in the storeroom for such reagents as concentrated sulphuric, hydrochloric and nitric acids.

26. The bottles should be equipped with non-drip pouring spouts.

27. Glass containers of strong liquid reagents should be stored in lead lined trays or in boxes containing a sufficient quantity of inorganic absorbent material (expanded vermiculite or glass wool, for instance) to sop up their entire contents, should the bottle break.

28. Carboys should not go into the storeroom unless the storeroom is on the ground floor with no intervening floors between it and the earth. A carboy of concentrated sulphuric acid in the shipping container has been known to crack, the acid penertate the wood floor and the concrete sub-floor of the store room and to drip from the ceiling of the room beneath with considerable damage to the lower room's contents—all during one week-end holiday.

29. Strong oxidizing anyhydrides and salts, such as peroxides, chlorates, permanganates or nitrates, should be stored so that there is no possibility that spilled quantities will fall on containers of oxidizing acids.

30. If there is any hydroflouric acid in the old-style wax bottle, it should be stored where there is no possibility of the temperature reaching the softening or melting point of the wax bottle. More recent hydroflouric acid containers are polyethylene and are not subject to this hazard.

31. "A table of hazardous chemicals prepared by the committee on hazardous chemicals" of the American Chemical Society and the National Fire Protection Association may be obtained from the National Fire Protection Association, Boston, Massachusetts.

32. All reagents should be considered as poisons but extreme caution should be used in handling cyanides. The minimum lethal dose of some cyanides may be contained under a fingernail. Cyanides and other particularly lethal reagents should be segregated from other chemicals.

33. Glass tubing should be stored horizontally in bins supporting the full length of the tubing.

34. Ringstands are stored more economically and safely if the rods and bases are disassembled.

35. Litter used by manufacturers to protect glassware from breakage during shipment is flammable. Do not leave the glassware in the containers in the storeroom. Unpack it and store it on shelves.

Emergency Equipment

36. Fire extinguishers should be located near the hoods, where they can be reached with a minimum of lost motion, and near the entrance to the laboratory. It is felt that locating an extinguisher just inside the laboratory entrance will create no especial problem since, if it is necessary to evacuate the laboratory *everyone* should leave. The possibility of using the fire extinguisher could be considered after the laboratory has been emptied.

37. The soda-acid type of hand fire extinguisher is not the preferred type in many industrial laboratories.

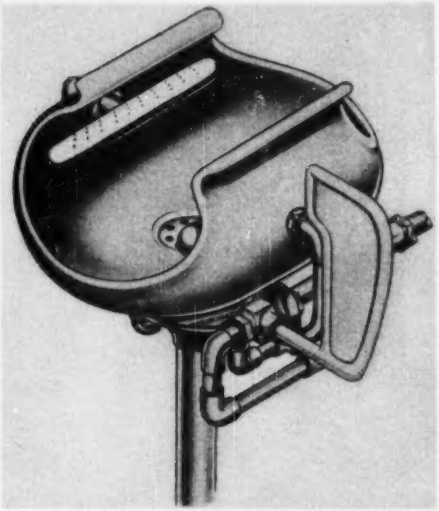
38. The compressed carbon dioxide extinguisher and the 300 mesh sodium bicarbonate powered by a CO_2 capsule are preferred. The carbon tetrachloride extinguisher is not recommended. Not only are the tetrachloride fumes themselves toxic but they are converted into even more toxic materials in the fire.

39. Whatever type is used a regular, frequent inspection should be made to certify that the extinguisher is in working condition.

40. A safety shower is a must. If pupils in the laboratory wore clothing that was flame resistant or slow burning, like wool, a fire blanket would provide adequate protection against most clothing fires. With the tendency, particularly shown by the girl pupils, to wear flimsy clothing that is highly flammable, a safety shower is necessary.

41. Most medical people agree that there is nothing better for fighting a fire in clothing than water and plenty of it. Fortunately the same thing holds true for acids, caustics and most of the other chemicals that can be splashed into a face or spilled on clothing. The shower should be conveniently located and should be tested at regular, definite intervals.

42. A face and eye shower may make the difference between a painful burn and the loss of sight to a person who has inadvertently splashed an escharotic in his eye. Eye burns should be washed in running water for a minimum of ten minutes and then should be seen IMMEDIATELY by an ophthamologist. Under no circumstances should the washing be interrupted for ANY purpose before the full ten minutes of washing has been accomplished.



Ten minutes of continuous, gentle flushing with water is recommended first aid for eye burns. A face-flushing fountain is illustrated here.

First Aid Equipment

43. The first aid cabinet should contain only the equipment needed for the first treatment of an injury. Any injury which would require elaborate treatment should be treated only by a physician. Self medication, treatment by pupil or instructor should be discouraged.

44. From this viewpoint, an adequately equipped first aid cabinet will have sterile dressings, a non-irritationg antiseptic, sterile petrolatum and a universal antidote.

45. A universal antidote for reagents accidentally taken into the mouth may be had by writing to the Fisher Scientific Corporation, Pittsburgh, Pennsylvania or to other laboratory supply houses.

46. Recommended first aid treatment for reagent burns other than in the eye is the immediate and copious flushing of the burned area with water. The treatment should be continued for at least five minutes or should consist of at least ten changes of fresh water.

47. There is one exception to the rule—the treatment of white phosphorous burns. The area contaminated with white phosphorous should be flooded with a solution of copper sulphate. A liter beaker would make an ideal container for a burned hand. Phosphorous will be plated with a copper compound which is inert. It may be picked out of the burn. The burn should be treated as a contaminated wound.

48. Pain from minor burns may be alleviated by applying a layer of thick paste made of sodium bicarbonate and water to the burned area.

49. Since many physicians object to the presence of unguents, carom oil, picric or tannic acid on severe burns, probably the most satisfactory FIRST AID treatment for such a burn is the application of a sufficient quantity of sterile bandage to protect the burned area from mechanical irritation. This should be immediately followed by attention from a physician. All burns more severe than first degree should be treated by a physician.

50. Besides the cabinet the first aid equipment should include a blanket which may be used to keep an injured pupil warm or to substitute for clothing damaged by acid or fire.

Personal Equipment

51. Every pupil should be provided with a laboratory apron and a face shield or eye shield.

Face and eye shields are a MUST in a safe chemistry laboratory.

52. Good industrial practice calls for eye protection for workers in many situations less hazardous than those prevailing in chemistry laboratories. Vocational shops are beginning to consider their environs as 100 percent eye protection areas. So should laboratories. Effective and inexpensive face shields are available. They should be worn as a matter of course.

53. Beaker tongs are available for handling hot solutions. Wrapping the hot beaker with a towel or other cloth is not at all advisable. Lacking beaker tongs, asbestos gloves should be worn.

Miscellaneous Technics

Many of the following suggestions are obvious. It is the obvious which is frequently taken for granted.

54. Each pupil should be taught to wash his hands at the conclusion of each laboratory period. Instructors or advanced pupils who act as storeroom assistants should wash their hands after each possible contamination.

54. Pupils should be taught that eating, or drinking water from beakers, is not permitted in the laboratory.

56. Testing the gas cock to see that the gas is turned off at the end of the laboratory period should be habitual with pupils and instructors.

57. A mnemonic which may help pupils remember to pour acid into water may be found in the spelling of "water." Pour the two into the mixing container in the order of the spelling. The "W" for water precedes the "A" for acid.

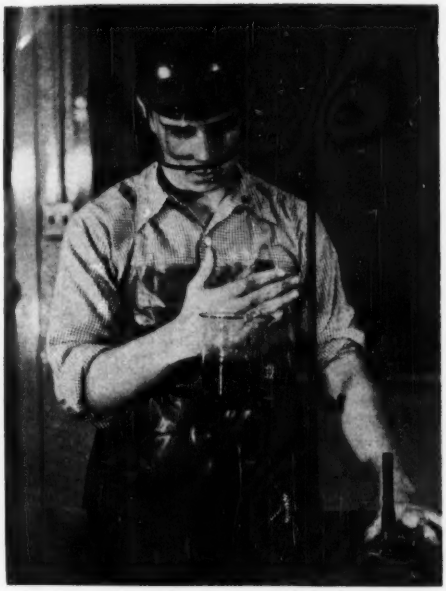
58. A test tube is much like a gun. Teach the pupil never to point the opening at another pupil, never to look down into one containing a reagent or hot water.

59. Smell of the contents of a test tube by wafting some of the escaping gas toward your nose by waving your cupped hand past the mouth of the tube toward your face.

60. Fire drills should be conducted frequently during laboratory periods.

61. Inadvertent burns may be avoided if the pupil is taught to test the questionable beaker, ring stand, wire gauze or other piece of apparatus by bringing the BACK of his hand near the object, thus measuring its radiation.

62. All liquid reagents, but particularly corrosive reagents, should be poured from their containers with the use of a pouring rod. This



Test the radiation of a suspected object by cautiously bringing the back of your hand near to it.

will obviate the possibility of small quantities of the reagent contaminating the sides of the container and, consequently, of burns from this source.

63. Wash the bottles regularly. Keep them clean. Wear a face shield every time corrosive reagents are handled.

Pouring rods, properly used, prevent splashing.

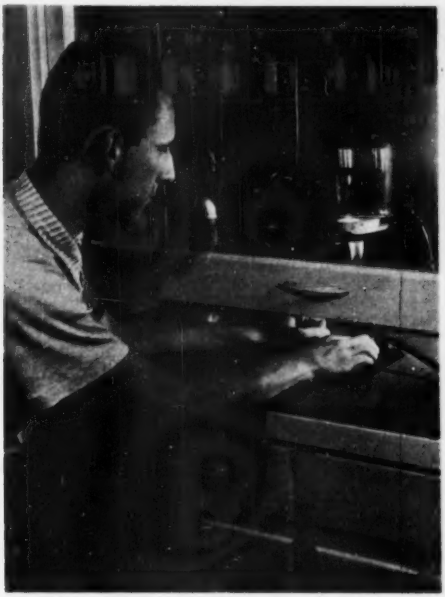
64. Using the mouth to aspire a pipette is hazardous, unsanitary, and unscientific. A cotton plug in the upper end of the pipette offers protection neither to the pupil nor to the reagent.

65. Pipettes may be aspired safely by using a rubber bulb or a syringe. One laboratory apparatus manufacturer makes a special pipette aspirator by use of which the amount of fluid in the pipette may be accurately controlled.

Use a bulb, not your mouth, to aspire a pipette.

66. Reagent bottles on the side shelves and on the pupils' desks should be prominently and accurately labeled. Read them with care and take care of them.

67. Spattering and sputtering almost always occur when solutions are evaporated to dryness. Many pupils are reluctant to cover the evaporating dish with a watchglass because the cover slows the evaporation. Inverting a 500 ml. short form beaker over the evaporating dish in the early stages of the process will safeguard the pupil without materially slowing the evaporation.



An inverted beaker, above the evaporating dish, protects the pupil without retarding evaporation. The process is conducted in the hood. The hood door extends below the pupils' face level.

68. A frequent source of cuts in the laboratory is when pupils attempt to force glass tubing into rubber stoppers. A convenient way to eliminate this hazard is to use a cork borer.

Select a cutter whose inside diameter is slightly larger than the outside diameter of the tubing. First, thrust the cork borer through the stopper. Second, with the borer inside the stopper, push the tubing through the borer. Then withdraw the borer, leaving the glass in place.

69. If thermometers are lubricated with a silicone stopcock grease before they are inserted in rubber stoppers, they may be withdrawn safely after they have been used.

70. Rubber stoppers to which glass tubing has become stuck should be discarded in the broken glass container. Their value is not great enough to justify the cutting hazards associated with the removal of the glass.

71. The use of glass cutting knives is preferred over the use of three-cornered files. The knives do not have a sharp point. They come equipped with handles.

72. Above all, neither instructor nor pupil should carry an unshielded file in the pencil pocket of the laboratory apron. Safest is to acquire aprons without pencil pockets.

73. The safe technic for cutting soft glass tubing is printed in most chemistry laboratory manuals.

74. The edges of glass squares may be smoothed with wire gauze. Use the gauze as you would a piece of sandpaper, brushing each edge of the glass with four or five strokes. Hard glass is difficult to fire polish.

75. All soft glass edges should be fire polished. All hard glass edges should be smooth.

76. Pupils should be instructed not to attempt to remove ground glass stoppers which have become frozen to their reagent bottles. The attempt to free frozen stoppers frequently results in a broken reagent bottle. Therefore the instructor should place the bottle in the sink, if the contents are not reactive with water, or in a quantity of absorbent material before he, and he alone, makes the attempt.

77. Pupils should be instructed to place broken and discarded glassware in a special container which may be placed at the end of each laboratory table. They should be prohibited from using the sink as a disposal place for glassware.

78. Many laboratory fires do not involve the furniture. They originate in ether, alcohol, or naphtha extractions using a reflux condenser, in determining the flash and flame points of petroleum products, in the careless handling of peroxides, perchlorates or other compounds having a high percentage of loosely held oxygen.

79. The use of an open flame burner in extractions is an invitation to disaster. The "small" quantities involved do not reduce the hazards, 250 ml. of a flammable liquid, fully volatilized and mixed with air might easily make up 400 or 500 ft.^{3} of an explosive gas mixture quite capable of literally raising the roof of the laboratory.

80. Extractions can be made with the minimum hazard by using a water bath in the hood. Where steam, to heat the water, cannot be piped into the laboratory, an immersion type electric heater could be used. AVOID an open flame or an exposed electric heater. The hood will take care of the vapor which may escape from the reflux condenser. Resistance heating with a mantle is also satisfactory.

81. Flash and flame tests should be made with extreme caution. A flash screen in front of the pupil is a good idea, either for flash and flame tests or for distillations.

82. Chemical wastes are a possible cause of fires and explosions. Metallic sodium, potassium, various nitrated compounds, volatile compounds dumped in the sink may cause fires or explosions. Special separate containers should be provided for the disposal of hazardous wastes. Definite instructions should be given to the pupils with each experiment.

83. Carboys of reagents, if reagents are purchased in such quantities, should be stored on the ground floor, i.e. the floor next to the earth.

84. The carboys should stand on inclinators.

85. Under no circumstances should pressure pumps be used to transfer reagents from carboys to laboratory storeroom containers.

86. Safety jackets should be provided for carrying the smaller bottles to and from the carboys. Both safety jackets and inclinators are available from laboratory supply houses.

It is not obstructionist perfectionism for the laboratory instructor to insist that his pupils be safeguarded with adequate hoods, safety showers, face shields and other equipment which is commonly found in industrial laboratories but is too frequently lacking in high school laboratories. It is, rather, a demonstration of his acceptance of the worthwhileness of every pupil entrusted to his care.

November, 1952

Lower Elementary Safety Lesson Unit

SCHOOL AND COLLEGE DIVISION—NATIONAL SAFETY COUNCIL—CHICAGO 11, ILL.

Teaching language arts, social studies and safety

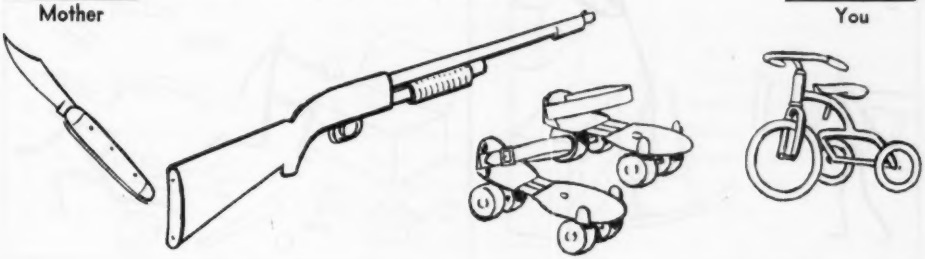
Sketch S9605A

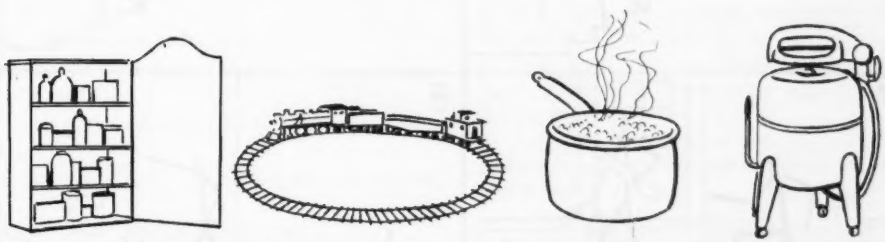
Still a Good Rule
HOME

Mother

A child should not touch some things.
Who should touch these?
Draw a line to show.

You





Many things at home are not safe for you.

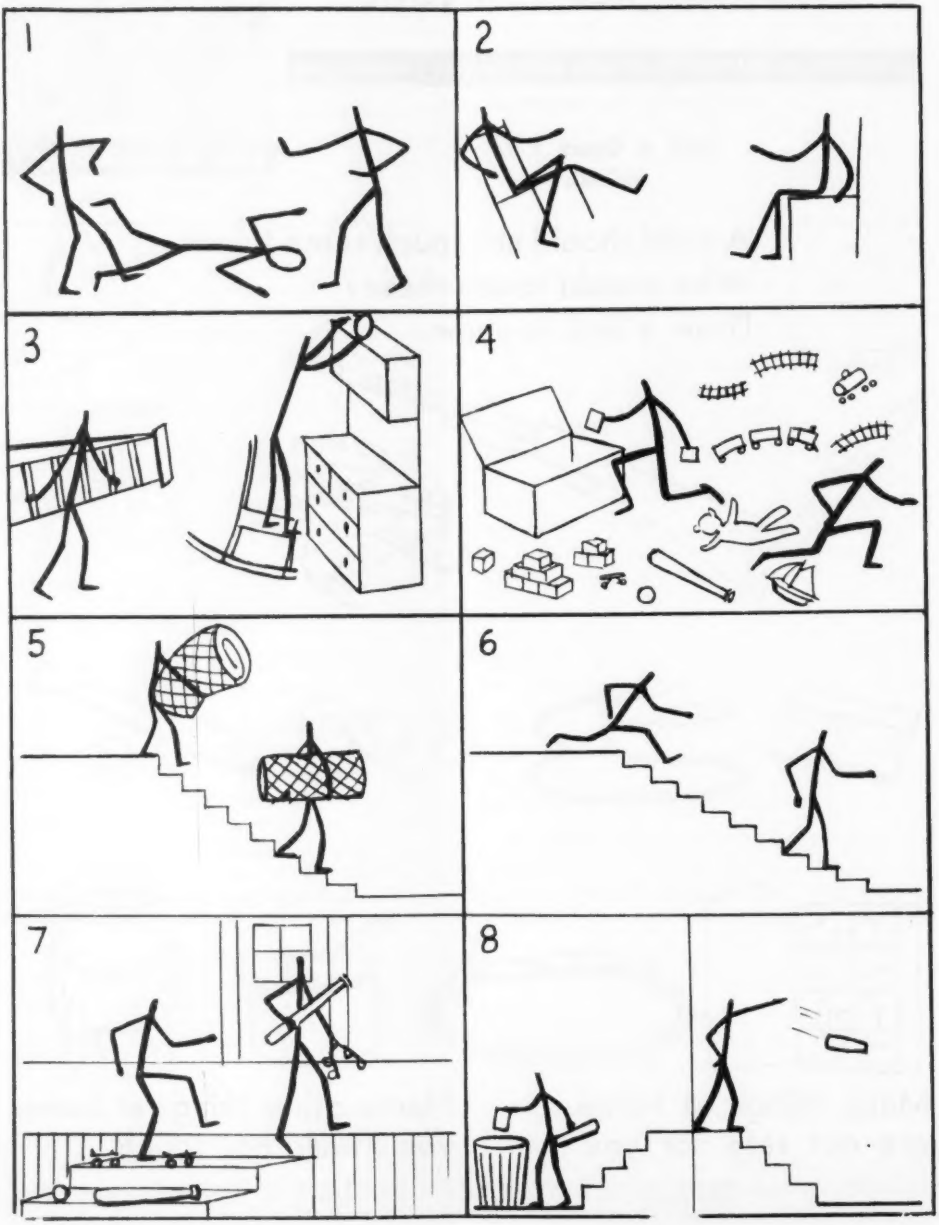
Name other things at home you should not touch.

Prepared by Leslie R. Silvernale, continuing education service, Michigan State College, East Lansing, Michigan. 1 to 9 copies of this unit, 6 cents each. Lower prices for larger quantities. Printed in U.S.A.

One boy is using his .

Draw a on that boy.

1. Tripping unsafe.
2. Chair teetering unsafe.
3. Use a stepladder.
4. Pick up playthings.
5. Have unobstructed view.
6. Walk, not run, on stairs.
7. Keep stairs clear.
8. Put cans and broken glass in containers.



November, 1952

Upper Elementary Safety Lesson Unit

SCHOOL AND COLLEGE DIVISION—NATIONAL SAFETY COUNCIL—CHICAGO 11, ILL.

Teaching language arts, social studies and safety

Sketch S9605A

Still a Good Rule
DON'T TOUCH

IN THE FOLLOWING LIST are some objects which are safe and some which are unsafe for a child to touch or to play with. Draw a red line through the dangerous objects. Tell why they are dangerous.

1. Can of lye
2. Electric toaster cord
3. Hanging electric wire
4. Oil can
5. Bottle of ammonia
6. Razor blade
7. Shovel
8. Clothesline
9. Washing machine wringer
10. Axe
11. Hoe
12. Power saw
13. Clothespin
14. Power lawnmower
15. Butcher knife
16. Saucepan
17. Kettle of boiling water
18. Box of matches
19. Electric light switch
20. Bottle of medicine
21. Broom
22. Broken bottle
23. Screwdriver
24. Dustpan

Avoid Falls

Copy and
Write the correct words or phrases in the blanks.

1. Use a good _____ to reach high places.
2. _____ up and down stairs.
3. It is a good idea to paint the bottom basement step _____.
4. There should be a _____ _____ _____ in the bathtub.
5. Stairs and halls should be well _____.
6. Turn on the light before you _____ into a dark room.
7. In winter sidewalks should be kept free from _____ _____ _____.
8. All four chair legs should be kept on the _____.
9. Window screens should be _____ _____.
10. Many _____ are caused by leaving objects on the stairs.

Some Things for Your Class to Do

1. Prepare a chart. At the top of the chart print "Don't Touch, Don't Taste." On the chart paste pictures and labels of dangerous substances and articles found in the home.
2. Present a program on home safety at a school assembly or before other class groups or at a PTA meeting. The "Don't Touch, Don't Taste" chart could be used as part of the program.
3. Make home safety posters and display them at school or in store windows.
4. Make a list of electric fixtures and appliances found in the home. Write safety suggestions for the use of each.
5. Exhibit an electric cord with has on it the Underwriters Laboratories label. Explain the value of this label.

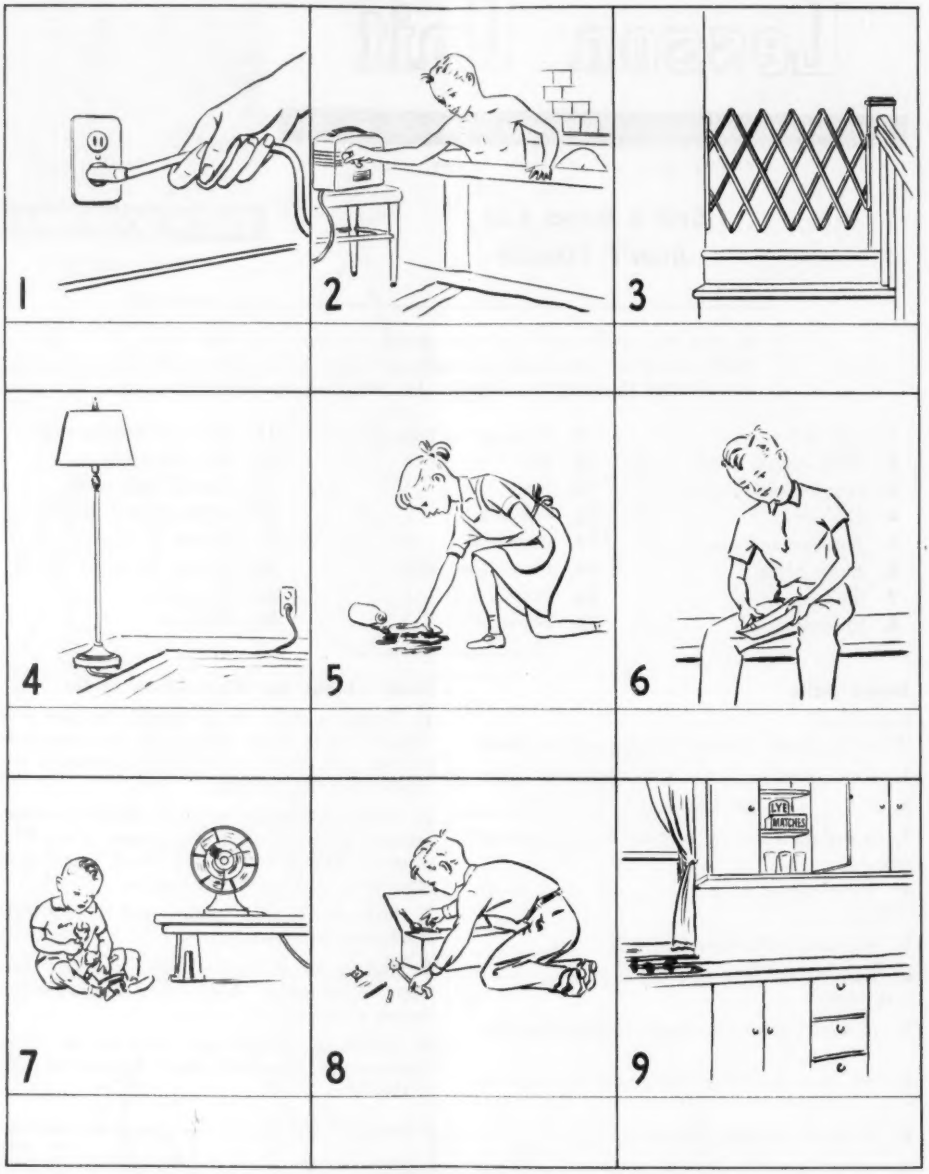
Answers: Don't Touch: The unsafe objects are numbered 1, 3, 5, 6, 9, 10, 12, 14, 15, 17, 18, 20, 22. Avoid Falls: 1—ladder; 2—walk; 3—white; 4—rubber mat; 5—lighted; 6—enter; 7—ice or snow; 8—floor; 9—securely fastened; 10—falls.

Prepared by Leslie R. Silvernale, continuing education service, Michigan State College, East Lansing, Michigan. 1 to 9 copies of this unit, 6 cents each. Lower prices for larger quantities. Printed in U.S.A.

Which Is Right

Always **Sometimes** **Never**

Choose the correct word to write under each picture. Explain your choice.



1. Never. Pull the plug, not the cord, when disconnecting.
2. Never. Touch electric switches or appliances only when your body or hands are dry. 3. Sometimes. When there is a baby in the house the stairs should be guarded by a gate. 4. Never. Do not cover a lamp cord. 5. Always. Wipe up spilled liquid immediately. 6. Sometimes. A sharp knife should be used only by a careful, skilled person. 7. Never. Put the electric fan where small children cannot reach it. 8. Always. Pick up toys after play. 9. Always. Keep matches, lye, etc. on a high shelf.

November, 1952

Junior High Safety Lesson Unit

Poster S9606A

SCHOOL AND COLLEGE DIVISION—NATIONAL SAFETY COUNCIL—CHICAGO 11, ILL.

For use in English, core, social studies, guidance, homeroom and safety classes

UNLOAD before you drive!
FIREARMS

TO RIDE, SHOOT *straight, and to speak the truth—*
This was the ancient Law of Youth.
Old times are past, old days are done;
*But the Law runs true, O little son!**

APPROXIMATELY 2,250 PERSONS were accidentally killed by guns in 1951. Usually one thinks of hunting as being the major cause of gun accidents. Yet, of the 2,250 persons killed, 900 of them were killed by gun accidents in the home!

A further analysis reveals that during the years 1949, 1948, 1947 and 1946, firearms were the third leading cause of *all* accidental deaths in the 10 to 19 year age group. Records of the National Office of Vital Statistics show that about 15 percent of the yearly fatal firearm accidents occur during this month—November.

Although records for non-fatal injuries—loss of eyesight, paralysis, loss of fingers, and similar injuries—are not available, their total exceeds the death total.

Accidents usually occur through carelessness or ignorance. One of the ways of reducing accidents, then, is to learn the safety rules for handling firearms and to practice the rules carefully.

Listed below are several statements concerning the handling of firearms. See how well you rate.

Do You Know How to Handle Firearms Safely?

Copy and

Mark True or False. Upon completion, discuss each statement thoroughly.

_____ **1.** A two inch thick pine plank would make a good target backstop for .22 caliber rifle practice.

_____ **2.** The best way to carry a gun is with the muzzle end pointing in back of you.

_____ **3.** Shooting a rifle at a target in the middle of a large lake can be extremely dangerous to people on the far side of the lake even though the bullet hits close to the target.

_____ **4.** Shooting a .22 caliber rifle at a target in a tall tree is perfectly safe if no town is closer than a half mile.

_____ **5.** The gun's safety should never be released until you are ready to shoot.

_____ **6.** It is always a good idea to wear something red when walking through the woods during the hunting season.

_____ **7.** Since wood is soft, there is no danger of a bullet ricocheting off wood.

_____ **8.** When target shooting, it is best to put on the safety and to place the gun in a stand before checking the target.

_____ **9.** When walking through the woods at twilight during the hunting season, it is a good idea to whistle a tune if you are alone or to converse in a normal speaking voice with your partner.

_____ **10.** It is safe to use a rock for a backstop when target shooting because the bullet will flatten against the rock and drop to the ground.

_____ **11.** When target shooting, it is a good practice to have the observers stand well behind the person shooting.

_____ **12.** Air rifles are safe since they have no killing power.

(70% is not passing. Your one mistake may be fatal.)

Suggested Projects

1. Visit the police department target range and note the safety rules.

2. Interview several lawyers to determine if they have had experience in a case involving accidental shooting. Invite the one with the most interesting experiences to speak to your class.

3. Write to several manufacturers of guns and ammunition for data on care and use of guns, safety rules, etc. Manufacturers' names may be found in the school library. From these data develop a set of safety rules for poster display throughout your school.

**How many can find the source of this quotation?*

Prepared under the direction of Kimball Wiles, chairman, Division of Secondary Education, and Vincent McGuire, assistant professor, College of Education, University of Florida. 1 to 9 copies of this unit, 6 cents each. Lower prices for larger quantities. Printed in the U.S.A.

Nit and Wit—Humorous Slant

1. Write a humorous response for "Wit."

2. Have each member of the class read his response.

3. Discuss what safety rules have been violated.

4. Make your own posters depicting some of the foolish things people do with firearms.

Answers: Quotation: Charles T. Davis, *For a Little Boy*.
Do You Know How to Handle Firearms Safely? 1—F; 2—F; 3—T; 4—F; 5—T; 6—T; 7—F; 8—T; 9—T; 10—F; 11—T; 12—F. Suggestions for Nit and Wit: 1—Your head: you mean; 2—Don't worry, you'll hit something; 3—You're not kidding; 4—Yes, and I'd like to keep it awhile; 5—Who? The Hunters; 6—Don't worry, you'll have one.

Senior High Safety Lesson Unit

November, 1952

SCHOOL AND COLLEGE DIVISION—NATIONAL SAFETY COUNCIL—CHICAGO 11, ILL.

For use in English, mathematics, social studies, core, homeroom and safety classes

Poster S9606A

UNLOAD before you drive!

FIREARMS

Do Numbers Tell a Story?

DEATHS RESULTING FROM FIREARMS accidents have reached such proportions that these accidents are classified by the National Safety Council as one of the principal causes of accidental death. A statistical summary of the deaths due to firearms for a six-year period is shown below.

Year	Deaths Caused by Firearms
1946	2,816
1947	2,386
1948	2,330
1949	2,326
1950	2,250
1951	2,350

For the years 1947, 1948 and 1949 (the latest in which this breakdown is available) the third leading cause of ALL accidental deaths in the 10 to 14 and in the 15 to 19 year age groups was firearms.

An analysis of the 1950 firearms death total of 2,250 reveals the following:

1. In home accidents (house and grounds) more 15 to 24 year olds were killed by firearms than in any other kind of accident.

2. Approximately 900 persons were killed in home accidents involving firearms.

3. Approximately 1,100 persons were killed by firearms in other than home accidents such as:

A. Being shot by hunting partner.
B. Pulling a loaded gun through the fence muzzle first.
C. Carrying loaded weapons in dangerous positions.
D. Putting loaded guns in a car.

According to the National Office of Vital Statistics, about 15 percent of all fatal firearm accidents occur during November.

Discussion Questions

1. What might be one of the reasons for the high death rate in 1946 as compared with subsequent years?

2. Why do you think more 15 to 24 year olds were killed by firearms than in any other type of home accident?

3. What reasons do you think of that would explain the high rate of deaths in the 10 to 14 and 15 to 19 year age groups?

4. According to the National Office of Vital Statistics, about HOW MANY persons were killed by firearms during November, 1950? How does this figure compare with the monthly figure one would ordinarily expect with a year's total of 2,250?

Tell the Story

1. Make a bar graph of the death total for the years indicated in the table.

2. Make a series of posters emphasizing the main points of the firearms accident analyses for 1950.

3. Write a skit demonstrating safety measures for firearms.

Suggested Project

Through class discussion make a list of questions that need to be fully answered concerning safety measures for firearms. Listed below are some sample questions.

- What makes a bullet explode?
- How does caliber and gauge affect range?
- How does distance affect a shotgun pattern?
- How can guns and ammunition be safely stored in the home?
- What are some safety rules for storing ammunition?

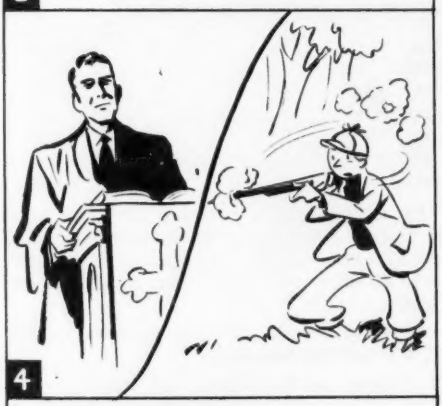
Add other questions that need to be answered in order to gain a better understanding of the use and care of firearms. Upon completion of the list, invite a gun salesman to come to school and give a lecture-demonstration answering these questions. Give the list of questions to the speaker in advance so he can plan his talk.

Prepared under the direction of Kimball Wiles, chairman, Division of Secondary Education, and Vincent McGuire, assistant professor, College of Education, University of Florida. 1 to 9 copies of this unit, 6 cents each. Lower prices for larger quantities. Printed in the U.S.A.

Safety—Literature Quiz

The pictures below depict situations that could have been prevented. You are asked to do the following:

1. Think of the title of a poem, a play, a motion picture, or a novel to fit each.
2. Tell what preventive measures could have been taken.



The Daily News
Boy Injured By Gun
CHICAGO — Charles Taylor was injured today when the "unloaded" gun with which he was playing went off.
Girl Hurt by "Dud" Bullet
NEW YORK — Betty Smith was injured today when a dud bullet, which she had thrown into the fireplace, exploded.
6

Answers. Safety—Literature Quiz: 1—Wreck of the Hesperus; 2—Through the Looking Glass; 3—Bring 'Em Back Alive; 4—Dr. Jekyll and Mr. Hyde; 5—The Light That Failed; 6—Tale of Two Cities.

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Start off the school year by outfitting your safety patrol with the best equipment and accessories.

AVAILABLE FOR IMMEDIATE DELIVERY

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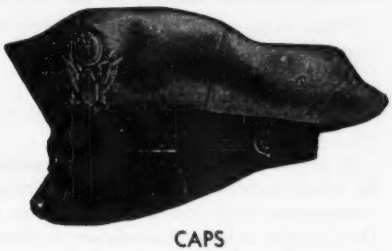
Safety Patrol Belts
Felt Arm Bands
Safety Buttons
Badges
Overshoes
And the Corporal Digby Safety Sentinel

WHITE RAINCOATS made of 100% American Rubber. Also available in yellow or black. Highly visible.



CAPS

Snappy eight-point style gabardine cap may be had in Navy Blue. Other colors on special request.

SAFETY PATROL BELT

The very popular adjustable school safety patrol belt. Made of two inch and 2½" heavy quality. Web with two-piece nickle rust-proof buckle with prong toggle. Both waist belt and shoulder strap are easily adjustable. The entire belt easily cleaned.

BADGES

WRITE FOR CATALOG TODAY!

GRAUBARD'S

"America's Largest, Safety Patrol Outfitters"

266 Mulberry St., Newark 5, N. J.

School Transportation

from page 5

local radio stations to advise parents of school children when inclement weather interferes with school bus operation. This is especially important during the snow season. Provision should be made for an organized operating procedure during inclement weather. The county highway department may well be asked to advise on this phase before the emergency arises.

For regular operation, the school system should establish a formalized series of policy statements and regulations for the advice of drivers, pupils, and parents.

All the avenues of the school system are available for instructing the pupils. Safety and bus patrols are helpful. Pupil poster contests on safe bus riding habits may be arranged. There are numerous films, film-strips and posters available on bus safety.

Bus riding may be integrated into the curriculum in many ways. Having the pupils prepare a scale map of the school community, spotting on the map the location of the homes of the pupils, and determining the most efficient bus route is an example of such a project.

PLASTIC SAM BROWNE BELTS FOR GREATER SAFETY

Available in either white or Federal yellow, these plastic belts glisten in the sun and are bright on dark days. Flexible—Smartly Styled—Adjustable—Easily Cleaned.
Federal Yellow Flags with desired lettering and Yellow Raincoats with Hats and Cape Caps to match complete the attire of your School Patrol.

Endorsed by Safety Councils, Auto Clubs and School Authorities Everywhere

The M. F. MURDOCK CO.
AKRON 8, OHIO

Pupils, especially those in the elementary grades, should be taught how to ride a bus properly. No arms or heads should be outside the windows where opposing traffic or adjacent right-hand obstructions can become hazardous before the pupil has time to withdraw. No romping and playing should be done in the bus since a bump or chuck-hole in the highway can throw the unwary pupil against a metal object. Other rules which seem to be obvious to the adult but which the pupil has had no cause to be aware of should be taught and explained.

All pupils should, of course know the purpose of the emergency door and should have actual practice in using it.

Every accident or near accident involving a school bus might well be made the occasion for teaching accident prevention. Questions raised for pupil discussion might include:

What were the reasons for the accident?

What steps could be taken to prevent a recurrence of these circumstances?

When will this action be taken?

Drivers, teachers and parents might well consider the same questions.

If parents are advised at PTA meetings and by school bulletins of the problems involved in transporting their children to and from school, their help in achieving a solution to these problems may be obtained more easily. Sometimes it might be advisable to have a key person in the parent group actually make the regular trip with the children on the bus.

Additional clarifying research is needed on the school bus "stop" law. Almost everywhere in the United States traffic lights are uniformly arranged and located, the "signs of life"—the octagon, the diamond, the rectangle, the circle, and the crossbuck—have the same meaning wherever they are seen. Similar uniformity in the school "stop" law might prove to be equally valuable.

Above all, the safety of the six and a half million children now riding school buses depends upon the education of the motoring public. In most cases it takes two or more vehicles to make an accident. The other driver, the one who is not in the school bus, must be told again and again and again that children cannot be expected to accept full responsibility for their behavior, that he must accept more than half the responsibility involved.

Only a cooperative effort, involving all of these factors and all of these persons, will succeed in making the highways safe for our school bus riders.

Price E. Clark Named to Association Post

Price E. Clark has just been named educational director of the accident prevention department of the Association of Casualty & Surety Companies. Mr. Clark comes to the association from West Virginia where he was assistant state supervisor of secondary schools in charge of driver education.

A native West Virginian, Mr. Clark has been teacher, coach, high school principal and county superintendent in the West Virginia schools.

He has been granted an A.B. and an M.S. by West Virginia University and has done graduate work at Teachers College, Columbia University, at New York University, at George Washington University and at Northwestern University.

He will be assisted by Thomas A. Seals.

Research Grants Available

Research grants for study and work in 16 foreign nations at both post-doctoral and graduate level are available for the 1953 school year. Funds come from appropriations made under the Fulbright Act. Detailed information may be obtained from the Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Ave., Washington 25, D. C.

Long After Gray's Elegy

The curfew tolls the knell of parting day
A line of cars winds slowly o'er the lea;
The pedestrian plods his absent minded way,
And leaves the world quite unexpectedly.

—Michigan Educational Journal.

How's That Again

(Report of pupil accident, verbatim)

Loretta was sitting in her seat and got her arm caught between her seat and the back of the seat.

15 VALUABLE TEACHING AIDS

Available Without Charge

As part of its continuing campaign for the greater safety and security of the public, Ætna offers a wide range of highly dramatic, instructive motion pictures. Subjects include: first aid, driving, bicycling, swimming, hunting, fishing, skiing and boating, fire and crime prevention. These 16 mm. sound films, many in full color, are produced by experts and are an ideal means of teaching safety to young people. Average running time: 15 minutes. They are available without charge for group showings.

Public Education Department SE-2
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Send for new circular of Sam Browne Belts, Arm Bands, Badges, Safety and School Buttons.

We can furnish the Sam Browne Belts in the following grade—adjustable in size.

The "Bull Dog" Brand Best Grade For Long Wear White Webbing 2" wide at $15.00 Per Doz. $1.50 each small lots.

3¾" ARM BANDS

Celluloid front—metal back. Web strap and buckle attachment.
No. 33 Blue on white JUNIOR SAFETY PATROL.
No. 44 Green on white.

SAFETY COUNCIL PATROL UNIVERSAL SAFETY WITH TITLE PATROLMAN OR CAPTAIN

Per Dozen .....$5.00 Lots of 50 .....28c each
Lots of 25.....30c each Lots of 100.....25c each

SIGNAL FLAGS—12x18 Inches

Red cotton bunting, white lettering, "SAFETY PATROL."
Per dozen.....$6.00 Less than dozen.....$1.00 each

Write for our Safety Patrol Circular
OUR RECORD 52 YEARS

AMERICAN BADGE COMPANY
129 West Hubbard, corner La Salle, Chicago 10, Ill.

South African Rules for Highway Safety

Almost forty-five thousand South Africans took part in the competition staged by the National Road Safety Organization of South Africa (Uitgereik deur Nasionale Padveiligheidsorganisasie, in Dutch) to select the best five rules for highway safety.

The contest, with a £50 prize, was won by a fourteen year old schoolgirl, Rosy Kara, who wrote:

1. Always be courteous towards other road users.

2. Control your driving speed by adapting it to conditions.

3. Always give correct hand-signals smartly and in good time.

4. Prevent dazzle by dipping your lights in good time.

5. Ensure that your vehicle is always in a road-worthy condition.

STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933 AND JULY 2, 1946 (Title 39, United States Code, Section 233) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF SAFETY EDUCATION, published monthly, 9 issues, September to May inclusive, at Chicago, Ill., for Oct. 1, 1952.

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5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.)

CHARLES W. TAYLOR
Editor

Sworn to and subscribed before me this 15th day of September, 1952.

Bernadette A. Lanouette, Notary Public
(My commission expires June 15, 1953.)

Data Sheets Available

SAFETY EDUCATION Data Sheets are now available on the following topics:

No. 1 Bicycles
No. 2 Matches
No. 4 Toys and Play Equipment
No. 5 Falls
No. 6 Cutting Implements
No. 7 Lifting, Carrying and Lowering
No. 8 Poisonous Plants
No. 9 Electric Equipment
No. 10 Pedestrian Safety
No. 11 School Buses
No. 12 Flammable Liquids in the Home
No. 13 Passenger Safety in Public Carriers
No. 14 Chemicals
No. 15 Hand Tools
No. 16 Nonelectric Household Equipment
No. 17 Sidewalk Vehicles
No. 18 Camping
No. 19 Alcohol and Traffic Accidents
No. 20 Cooking and Illuminating Gas
No. 21 Solid and Liquid Poisons
No. 22 Safety in the Gymnasium
No. 23 Laboratory Glassware
No. 24 Places of Public Assembly
No. 25 Fireworks and Blazing Caps
No. 26 Domestic Animals
No. 27 Swimming
No. 28 Small Craft
No. 29 Play Areas
No. 30 Winter Driving
No. 31 Night Driving
No. 32 Winter Sports
No. 33 Traffic Control Devices
No. 34 Safe Conduct in Electrical Storms
No. 35 Poisonous Reptiles
No. 36 Motor-Driven Cycles
No. 37 Animals in the Classroom
No. 38 Railroad Trespassing
No. 39 Bad Weather: hazards, precautions, results
No. 40 School Parties
No. 41 Home Workshops
No. 42 Horseback Riding
No. 43 Hiking and Climbing
No. 44 Hook and Line Fishing
No. 45 Summer Jobs—Farm
No. 46 Safety in the Woodshop
No. 47 School Fires
No. 48 Unauthorized Play Spaces
No. 49 Bathroom Hazards
No. 50 Safety in the General Metals Shop
No. 51 Safety in Pupil Excursions
No. 52 Highway Driving: rules, precautions
No. 53 Safety in the Machine Shop
No. 54 Summer Jobs
No. 55 Motor Vehicle Speed
No. 56 Welding and Cutting Safely
No. 57 Safety in the Auto Shop
No. 58 Winter Walking

Other data sheets are now in preparation.

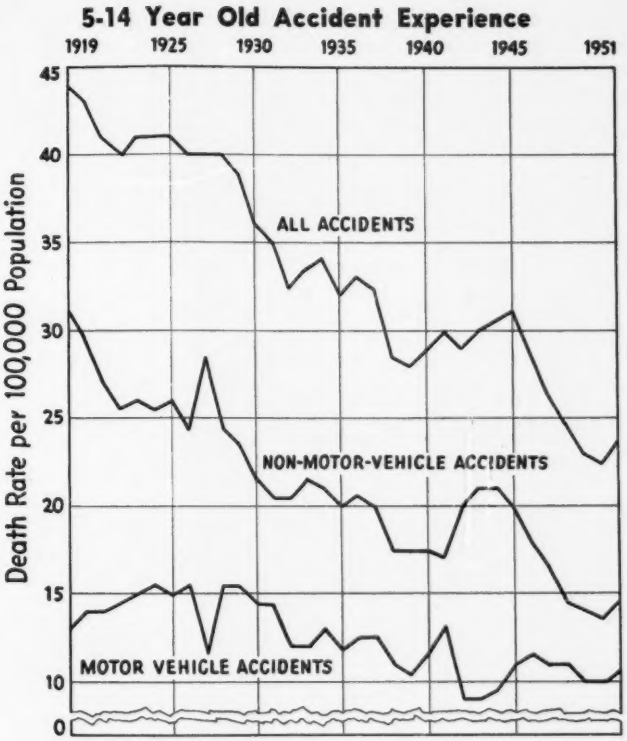
Willie came home after playing a tough game of football. "Ma," he said, "you know you say I've got your eyes and papa's nose? Look, Ma! I'm like grandpa too, now. No teeth!"

Handbook on Health

The National Conference for Cooperation in Health Education has prepared, at the request of the American Association of School Administrators, a Handbook for School Administrators which lists and describes the purposes of the 62 organizations which comprise the conference. It is intended to present to school administrators a listing of the resources for developing a program of health for school children. Copies may be bought from Health Publication Institute, Inc. 216 N. Dawson, Raleigh, N. C.

The Child Accident Death Rate Is Going

D O W N



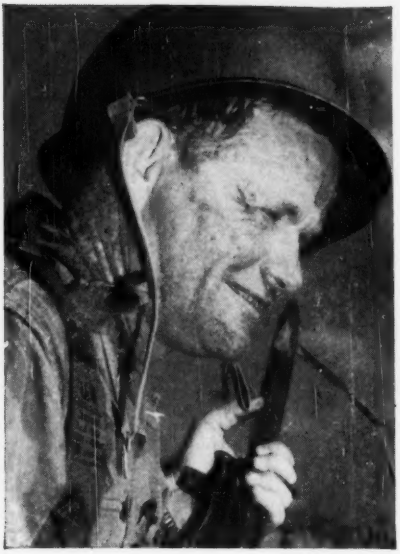
School people may justifiably claim
a large share of the credit
for decreasing the 1919 accident death rate
of five to fourteen year olds
from 44½ per 100,000 population
to 24½ in 1951

POSTERS
LESSON UNITS
DATA SHEETS

are tools specifically designed to help teachers save lives

For further information about these and other services of the National Safety Council to the teaching profession Ask for school safety services, Guide 2.3

Address inquiries to National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill.



M/Sgt. Hubert L. Lee, USA Medal of Honor

FOUR TIMES Sergeant Lee's platoon had taken, then lost, the hill near Ip-o-ri. On the fifth try, the sergeant, though hurt, was leading. A Red grenade hit him, seriously wounding both legs. Refusing assistance, he advanced by crawling, rising to his knees to fire. He caught a rifle bullet in the back. Still he wouldn't be stopped. Finally, with 12 survivors of his platoon, he took the hill, then let the stretcher-bearers carry him away. Today Sergeant Hubert Lee says:

"In thirteen years of soldiering, I've seen brave enemies defeated—because things had collapsed back home. That's why I can appreciate what a good thing it is when people like you buy United States Defense Bonds.

"I'm told that you, and millions of others, own a total solid investment of *50 billion dollars* in our country's Bonds. That's good! That's *strength!* A man can face a hill when he knows that *people like you* are keeping our homeland strong."

* * *

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Peace is for the strong! For peace and prosperity save with U.S. Defense Bonds!

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